



MEETING SUMMARY

CALIFORNIA WATER PLAN UPDATE 2013 GRAPHICS WORKSHOP COMPANION PLANS AND CLIMATE CHANGE 1:00 PM – 4:00 PM 815 S STREET SACRAMENTO, CA

MEETING OBJECTIVES:

1. Receive feedback and suggestions on graphics Companion Plans and Climate Change

Welcome, Introductions and Agenda

Lisa Beutler opened the conference call with a review of the agenda. Introductions were made around the room and on the call.

Companion Plans

Megan Fidel of DWR explained the goals of the companion plans. They tell a story and must be understandable to a wide audience. California Water Plan (CWP) is used by experts, college students, and the public. Graphics travel far and wide. They get pulled out and used into classrooms and media. It must stand alone to tell its own story. She stressed to think about ways to improve them, but not sending unintended messages. Initially companion plans were listed. Maybe that's appropriate, maybe not.

Jose Alarcon of DWR brought up the org chart with companion plan agencies highlighted handout to discuss. He explained what is highlighted are the agencies that are part of State Agency Steering Committee. The chart will be revised to add new state bodies like the Delta Stewardship Council. Another example is what is shown on the Governor's website – a challenge for graphic staff to work with.

Comment – There is an organization relationship with one graph and a relationship showing where the plans relate in the other graph [companion plans and water plan objectives handout or Table 3-1].

Suggestion – Regarding org chart maybe show the plans on the right side?

Question – What would be the gain if you add the companion plans to org chart? To put something in the text as how it's linked to will be helpful.

Comment – On the org chart page, the highlighted agencies with a drop down menu with the plan it relates to.

Question – What does that get you in overall meaning?

Comment – Featured plans are the State Agency plans where there is a commitment to align with CWP objectives. Org chart with companion plan agencies highlighted shows this. It gives a feeling some agencies are more involved than others. Second set of graphics addresses where the plans have certain characteristics.



Question – Will it complicate or help to illustrate the interconnectedness who the organization personalities are. Someone who is administrator, production manager, doing the heavy lifting, records keeper, etc. This person has 80% job, this is management. Maybe a pie chart or vin diagram to show the plans have overlapping responsibilities. I want to attach the companion plans to the org chart.

Comment – The text identifies if its water supply or water quality or stewardship. In order to attach the plans to the org chart you have to identify the Water Plan objective and category it falls into.

Question - But why? Goal would be to take the plans and loosely attach them to the agencies on the preceding org chart page. Highlighted agencies can have a blue box on right identifying what plans the agency sponsors. Tell a story better if it shows what part and pieces the report belongs to.

Comment - I'm not sure the typical audience is concerned about the agency. It's the intersection of the 13 objectives and these plans. If you have 13 objectives overlaid with the different agencies, it could get crazy. Take away is we are mining all these documents to inform our objectives. Looking at a better way to show that compared to what's shown in Update 2009 Table 3-1.

Comment - If you flip through this visually are getting some info then you see this who is involved then how they are involved. To tie these people with this to this is what we are trying to visually achieve. If there's some small dash next to the text may pull in to read this. If Table 3-1 is the heart of the take away everything has to point at this.

Comment - There are two take away. We coordinated with these agencies and we coordinate this way.

Comment - Where people use the most is those to understand the pieces they need to consider their own planning process or how government works in general. Legislature used it. Little Hoover Commission used it. Media used it. Org chart shows who is involved. Table 3-1 is to show the alignment where in the CWP is represented. Under Water Plan Objectives column who would know what those objectives are and where to find them.

The discussion went further as to how to connect Table 3-1, 3-2 and the org chart to make it understandable to an audience not familiar to the CWP. There was a suggestion of using international symbols or agency logos with sidebars to explain what it is and why it is important. Another suggestion is a picture representing flood then stemming from that picture are the plans that relate to flood and the agencies that need to be contacted.

ACTION ITEM: Need a graphics request form. Scott and group can sit down, meet and talk more about how to get story across. Jose or Chas could do the request form.

Climate Change

Elissa Lynn of DWR discussed that graphics she will be showing are a revisit of what was done for the climate change mitigation graphic since the last graphics climate change workshop, and eight new graphics not previously discussed. She also introduced Andrew Schwarz part of her staff. She started with the light bulb chart depicting energy intensity and types of water used. The chart will be in the Regional Reports. Energy intensity refers to energy required in kw hours/af extract. Not total water used in each region. Water types we chose to use was from the



butterfly chart. Yet to deal with desal and recycled. Goal is for water managers to think about their energy intensity in their portfolio. There will be a caption, footnote and references to be added.

Question – Does it include energy to get it to a person's tap?

Comment - Get at the piece of the puzzle that has a very high correlation to the region and not the other part of the puzzle that are not regional specific. You will find high energy input treatment facilities in every region and low input energy depending on water quality there. Trying to cut this off at a reasonable level to obtain data without digging at every water treatment plant.

There was clarification as to what the light bulbs represented. Each bulb represents 1- 500 kw/af. A non-lit bulb means zero intensity. There are no marginal bulbs since it is too technical for a broader audience.

Question – Does it account for energy for water to reach their district?

Elissa – The plan is to have another workshop in the winter on other water types. This is the first CWP to do this graphic. Some types of water will not appear will be explained in a foot note like reuse, in stream, environmental. Are we going with the same types of water? Let us know to modify. We would like to do brackish and desalinization. How to handle hydropower. If you offset that then the light bulbs go away and looks like it takes no energy.

Andrew - These numbers do not include large hydro at head of State Water Project or Central Valley Project. Energy to get over Tehachapi is included because it's silly to not capture it. Water at head does not matter where it goes. Many more acre feet pass through turbines than energy it takes to go to the region. Difficulties to getting exactly those numbers. Talk about the energy that is generated by the power plants but not put it in the graphic.

Elissa moved on to the next graphic she calls “bubbles” that was featured in the 2009 Highlights. It is a well referenced graphic worthy to be included in Update 2013. Text follows after the graphic to describe it in more detail.

Comment – Use this as a directive graph to your content. If interested a web user can click on the bubble for more information. I am trying to make the CWP non-print and web friendly.

Question - Couldn't this also be about energy intensity. Like where is the energy in the system? You can identify on the picture how hard it is to count.

Andrew - Need an underline base map since the scale of this is wrong. Go down to the house to the faucet to their water heater showing this number is not included but is represented of 7% statewide energy. You are not getting all these things but we recognize they are there. If you click here it will take you to a report or reference guide showing how DWR got those calculations.



Comment - How the energy moves around the system would be good to know.

Elissa - Energy intensity? Do we do one for the State? Maybe go to the Regional Report for details. If there's interest Scott and Andrew talk. We could have two bubble charts in one section. This new bubble diagram will serve as the context for the regional report light bulb figures, and will appear in the statewide CA Water Today, probably in the Water-Energy section.

ACTION ITEM: Andrew and Scott to develop Water-Energy Bubble Diagram, including graphics request form.

ACTION ITEM: Climate Change staff review Pacific Institute's water footprint study.

Elissa moved on to the next graphic showing three graphs of the American River, Feather River and Sacramento River 3-Day Maximum Flow charts that will be vertically stacked since compiling the data into one chart will be too much. Each chart shows an increasing trend line. One of the climate change impacts is you cannot rely on historic hydrology to explain what will happen in the future.

Comment - Do not hide the interpretation. Have a bubble that shows these are higher than ever. Show directly on the diagram the take home message.

Andrew – Caution to the bubble captions: little ability to attribute these to climate change.

Elissa went on to the next graphic that did not have a caption. It shows the State Water Project impacts from climate change. Climate change staff did a sensitivity analysis at Oroville. The blue line is historic. At one degree higher you see the peak historical flow moving back in time. She will change the degrees from Celsius to Fahrenheit. The take home is peak flows are occurring earlier in the season with increase in temperature.

Comment – Say what you mean right on the graph.

Comment – Make a note on retention, maintenance and water rights.

Andrew - Graphic will show this is what's happening to inflow reservoir and water supply impacts. Text should include range of projections of future temperature by what will occur by this year in the future. Percentage of years we spill water could be good to explain.

Comment – Look at FERC data for this information.

Andrew - Finding the data and who has it. Then run the simulations. CalSIM did this. They may see when releases from the reservoir are higher. It would be easy to put in a graph. Don't know a sensitivity analysis like this has been done.



Elissa - Another change in CA is reduced snow pack. Hoping to get new data into a graph that was used in Update 2009 to show historic snowpack and projections of what it will be due to warming. What I have so far is the latest study from SCRIPPS. I want it to look like the 2009 graph once the data comes in. Promise the graph will be easier to read than what is on the handout.

Comment - Throw in big picture of hiking in Yosemite in December and be barren. Or that there's no snow surveys in December to get your point across.

Elissa - Problem is that picture does not mean the problem is directly related to climate change.

Elissa moved on to the two sea level rise graphs. First graph shows historic geologic past of sea level rise. Then observations and uncertainty then different projections in the future that will be described in the text. The graph is global. From that same sea level rise report is a set of projections that was done via bar graph. Graph broken down by 2030, 2050 and 2100. This data is important. Sea level rise goes up, uncertainty goes up but so does the absolute amounts. She asked if it's worth showing both graphs or one of them.

There was confusion on what the green bar on the Regional and Global Sea Level Rise Projections meant. It was suggested a note somewhere mention that it is interim guidance California is using but will be updated since the Vermeer and Rahmstorf report developed new data. Additional suggestions:

- Note that Washing and Oregon covers the Mendocino coast and up.
- Drop centimeters. If you have a central tendency have a test box show acres inundated, dollars loss. Look at Pacific Institute study.
- Regarding graph one, change the purple color to something less attention getting.

Elissa concluded a possibility of doing a statewide "bubbles" graphic for water-energy above.

Also, a State Agency Steering Committee member suggested if we can get the data for historic rain/snow trends, and we may, the idea of looking at historic record proportion of snow to rain. Is there more rain, less snow? Aaron Cuthbertson of DWR trying to find the data and show proportion of rain to snow in the last 100 years. Is that of interest?

ACTION ITEM: CC team to investigate viability of this new graphic.

General Audience – Yes.



Participants

In Person

Maria Elena Kennedy – CWP DAC Caucus Co-Chair

Jaun Perez – Cal EMA

On Phone/Webinar

Laurie Barlow

Jack Simes – US Bureau of Reclamation

Evon Willhoff - PCL

DWR

Jose Alarcon

Emily Alejandrino

Megan Fidell

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Facilitator –

Lisa Beutler - MWH